Index—January to December 1978
Vol 82 Nos 983-994

AUTHORS

Abson, J W, 521
Allender, F A H, 18
Austin, E P, 521
Bayley, R W, 531
Berry, N S M, 353
Betts, N L, 10
Black, J H, 174
Boyes, R G H, 766
Butt, K F C, 179
Chatterton, J B, 89
Collingwood, R W, 487
Crossley, A M, 509, 785, 820
Davis, J M, 487
Delaine, J, 217
Denny, Dr R C, 468
Fox, G T, 113
Ginocchio, J C, 683
Grandage, R E, 503
Hale, P E, 515
Hazlehurst, J, 279
Heaton, Dr H M, 395
Hodgson, M, 36
Hough, C M, 741
Howell, Dr F T, 667
Hoyland, G, 531
Hull, J E, 27
Hutchinson, D, 492
Kelsey, A J, 499
Lekkas, T D, 113
Low, C, 753
Marples, L, 97
Maximova, L, 115
McBain, D, 238
Mörgeli, B, 683
Nightingale, E F, 179
Overend, D, 285
Palm, A, 407
Parsons, I E, 506
Pike, T, 727
Prestwich, D R, 479
Price, C A, 472
Smith, Dr T D, 351
Todd, J J, 771
Turner, M T, 527
Upton, J, 515
Walker, P, 279
Williams, R, 727
Williams, R W, 472
Worthington, R, 100, 143, 211

SUBJECT INDEX

A

Actuators, pneumatic, for electrical switching, 259
Aeration systems, fundamental characteristics of, 771
Afghanistan drilling order, 856
Agency Agreements:
  Automated Water Conditioning Ltd and Rohrback Instruments Ltd, dual marketing, 140
  Hands-England Drilling Ltd — Redhurst Engineering Co Ltd
  Megator Pumps & Compressors Ltd — Greenacre Pump Services, 390
Agency agreement ended — Fluke International Corporation and ITT Instrument Services, 624
Agency Appointments:
  Bettis valve actuator — A Robinson (Engineering Services) Ltd, 208
  Bowan Tools — Robert Frazer Group, 332
  Manning Environmental Corporation of California — Techmation Ltd, 207
  Neptune Measurement Ltd and C Bancroft Ltd, 724
  Pringle centre pivot system — Farrow Irrigation, 208
  Reiss Engineering Co Ltd — Axel Larsson Maskinaffer AB, 206
  Reiss Engineering Co Ltd and Scott & English Ltd, 624
  Sybron Italia SpA — Cole Chemicals Ltd, 208
Agrément Board 500th certificate, presentation, 137
Agrément certificate awarded, Proofex 12, 552
Air blowers, 435
Alums, testing of coagulants and their application to the development of a polymerised alum, 100, 143, 211
Ames Crosta Babcock, new premises opened, 620
Analyser, elemental, 68
Anglian Water Authority:
  Annual progress report, 454
  Boston STW completed, 589
  East Anglia future water supplies, 389
  Fast-tow generators, 296
  Future use of water, 275
  Giant steam engine saved, 724
  Ipswich drainage contract, 594
  Lings reservoir contract, 796
  Norwich sewage disposal feasibility study, 722
  Opening of Cambridge Sewage Treatment Works, 719
  Rutland water pipe corrosion protection, 314
  Water towers contract, 186
Annual Reports:
  Anglian Water Authority, 724
  Auckland Regional Water Authority, 140
  British Hydromechanics Research Association, 140
  Brown Boveri, Kent, 392
  BTR Ltd, 392
  Cambridge Water Company, 140
  Central Water Planning Unit, 624
  Ciba-Geigy Ltd, 392
  Colne Valley Water Company, 208
  Essex Water Company, 140
  Institution of Public Health Engineers, 624
  International Finance Corporation, 916
  Mid Southern Water Company, 140
  National Water Council, 724
  Northumbrian Water Authority, 916
  North West Water Authority, 916
  Severn-Trent Water Authority, 724
  Southern Water Authority, 916
  South Staffordshire Waterworks Company, 140
  South West Water Authority, 916
  Thames Water Authority, 916
  Water Research Centre, 140, 720
  Water Space Amenity Commission, 916
  Welsh Water Authority, 724
  Wessex Water Authority, 916
  Wrexham & East Denbighshire Water Company, 208
  World Bank, 916
  Yorkshire Water Authority, 140, 724
Anti-bacterial rubber approved by NWC, 721
Anti-corrosion system, Sultanate of Oman, 693
Antifoam emulsion, 861
Aquatech '78 Preview, 565
Aquatic weedkiller, safety clearance for, 604
Artificial recharge in the Lee Valley, 479
Association of Water Officers, conference and exhibition 1978, 7
Association of Water Officers, annual conference & exhibition preview, 147
Automatic operation for special seatless drain valves, 347

B

Backflow preventers, 703
Barges refloated, 86
Bender pipes, hydraulic, 194
Biocides, ICI to double capacity for, 537
Biological treatment unit, packaged, 797
Birmingham drought warning, 536
Blakeborough & Sons Ltd, celebrations, 207
Blowers, high-pressure industrial, 260
Books:
  A Guide to Model Water Byelaws, 244
  Energy and the Environment — Cost-Benefit Analysis, 691
  Industrial Wastewater Management Handbook, 244
  Pipeline Design for Water Engineers, 244
  Principles of Water Quality Control (second edition), 666
  Small Scale Water Power, 691
  Systematic hydrology, 678
  Water, 666
  Water Purification in the EEC, 244
Borehole transmitter, 67
Bottle gully, 262
Brackish water treatment in Bahrain, 313
Breaker, lightweight, 318
British Industrial Exhibition, Mexico City, George Kent Group, 815
  British Pump Manufacturers Association forms new working group, 206
British pumps for USSR, 374
British Standards Institution, protective coating of iron and steel, 8
British Water & Effluent Treatment Plant Association, elections, 539
British Waterways Board:
  Canal reconstruction scheme, 624
  Government allocation 1979/80, 140
  Toddbrook reservoir investigation, 332
  Wildlife calendar, 724
'By the Way', 16, 129, 145, 245

C

Canal reconstruction scheme, British

Waterways Board, 624
Carbon, granular activated, for purifying acidic solutions, 99
Carbon regeneration furnace, Coleshill — Severn-Trent Water Authority, 303
Carbonation plant for Dubai, 795
Casing advancer reduces drilling operation, 259
Cavitation in waterworks valves, 503
Centrifuges, range of, 861
CFIT Symposium on water systems corrosion, 390
Change of Names:
BA Contracts Division — now BACO Contractors Ltd, 624
Biwater Ltd — now Biwater Shellabear Ltd, 86
Hydrotole Ltd (chemical and process specials department) now Flowchem-Hydro Ltd, 86
E Ireland Pipework Ltd — now Higgs & Hill Pipework Ltd, 208
Charging for water services, discussion paper, 539
Chemical dosing pack, plug-in, 703
Chemicals used in water treatment, depth study of, 816
Chemviron award winners, 391
Chlorine analyser, continuous, 261
Chromium, removal of bacteria, 67
Civil engineering specification for the water industry, 814
Clamp, pile lifting, 70
Closures, high-pressure, 432
Coating material, 318
Coatings, protective, all surfaces, 260
Coffer-dams, refloating barges, use for 86
Company Acquisitions:
ASEA Ltd — Lyjon Triconic Ltd, 7
Filtration & Separation Products — Fisons Separation Products, 140
Plascoat International Ltd — Griflex Products Ltd, 140
Pollution Abatement Ltd — International Consulting & Laboratory Services Group, 536
Company Reorganisations:
Degremont Laing link with Swinney Engineering, 273
Compressor gets face lift, 318
Concrete curing liquid, 69
Conductivity/salinity recorder, portable, 261
Containers, collapsible on road trial, 797
Corrosion/abrasion resistant linings, 799
Corrosion inhibitor, 376
Corrosion prevention directory, 392
Corrosion of water systems, CFIT Symposium, 390
Crane, crawler, multi-purpose, 195
Crane, lorry-mounted, 194
Customer training service, 260
Continental waterways, British advice on, 274
Corrosion preventative, 317
Corrosion resistant bolted steel tanks, 317
Current meter, 379
Cyprus irrigation scheme, 694

D

Dams:
Airy Holm, 66
Cement grout for Lliw Dam, 421
Glen Devon, spalling, 138
Kielder slip membrane protects culvert, 433
Megget reservoir, 7
Safety go-ahead for Glen Devon, 330
Dangerous chemicals, new poster on labelling of, 390
Deacidification in water treatment, aspects of, 683
Dealkalising system, 194
Deionisers, standard, 261
Department of Trade, Director General appointed, 724
Desalination:
Colorado River plant, Du Pont files law suit, 138
Dubai plant contracts, 693
Plan for Maderia, 314
Red Sea coast plant, 594
Saudi Arabia, 66
Working party report 1977, 8
Destratification in reservoirs, 487
Destratification system at Wimbleball, 329
Digesters, what's in a name? 785
Digital thermometers, portable, 607
Dinorwic, shaft seals for pump turbines, 122
Directory of corrosion prevention, 392
Dissolved air flotation, 515
Dissolved air flotation plant, 703
Dissolved oxygen meter, 797
Distribution network analysis, 472
Distributorship of pumps, UK, 722
Drainage scheme, Ipswich, 594
Dredger, barge-mounted, 255
Drilling/soil sampling course — Acker Drill Co Inc, 332
Drilling rigs — £1million order, 795
Drinking water plant, mobile, 605
Drum handling attachments, 318
Du Pont files law suit in USA, 138
Du Pont (UK) Ltd, Londonderry factory expansion, 624
Dynamic seal on new valve, 344

E

East Anglia, future water supplies in, 380
Eastbourne Waterworks Co, second generation telemetry system, 279
Eccentric plug valve, 343
Edinburgh Castle, path drainage, 121
EEC Directive on Public Services Contracts, 539
EEC grants for Scotland, 719
Effluent & Water Treatment Exhibition and Enpocon 1978, 6
Effluent sampler, portable, 605
Effluent treatment plant opens, Henry Cooke's, 789
Effluent Treatment Plant:
British Steel Cleveland Works, 122
Ceca treatment for paper mill, 121
Chrysler paint and metal finishing process, installation for, 122
Dye water, textile manufacturer, 694
Ford contract, 593
Kodak factory installation, 186
Portals water treatment contract, (paper mill), 374
Royal Naval Aircraft Yard, 185
Solids screening, low-cost, 68
Surface water/oil separation at Shell refinery, 121
Treatment and re-use of strong organic effluents, 660
Effluent & Water Treatment Convention, 626
EIB loans for UK, 549
Electric motor enclosure, 799
Electrode, automatic cleaner for, 124
Electronic tracking course, Electrolocation Ltd, 208
Emergency shut-off valve lock, 347
Endoscope, bulb-lit rigid, 704
Energy, must the world run out of, Crown Agents publication, 274
Engineering education awards, Filtration Society, 208
Epoxy coating, 702
Essex Water Co premises, 313
European Investment Bank loans, UK, 274
European hydrologic system, 83
Events: 62, 112, 116, 182, 249, 311, 369, 600, 697, 790, 854
EWT and ENPOCON afterthoughts, 818
EWT and ENPOCON Exhibition Preview, 629
Excavation, under water, 67
Excavator, safety cab, 69
Exhauster, liqiud jet, 800

F

Fanfold chart for recorders, 602
Far East agency network, Tintometer, 390
Fibrescope, low price, 69
Field testing kits, 259
Films, Loughborough University, technological, 208
Filters:
Plastic medium, 192
Portable, for airline, 122
Pressure leaf, large area, 124
Slow, sand, 113
Water purification, 606
Filtration media for sewage applications, 422
Filtration, plastic medium, 65
Filtration Society, Travel and Study Awards, 208
Filtration system, automatic, 707
Filter wash system, automatic, 421
Finniston Committee of Enquiry, IWES evidence, 205
Flexible coupling alignment-kit, 799
Float switch, 801
Flocculators, magnetic, 379
Flood aid announced by Government, 137
Flood alleviation, the benefits of: an evaluation of assessment techniques in the United Kingdom, 89
Flood defences, Thames tidal, 185
Flow indicator, 861
Flow measurement, 606
Flowmeter, electromagnetic, 193
Flowmeters, 606
Flowmeters, magnetic, 376
Flowmeters, vortex-shedding, 241
Flow rate counter, 184
Flow switch, Doppler ultrasonic, 377
Fluoride, debate on, 536
Foster Cambridge, instrument guarantee increase, 549

G

Gabion channel lining, 856
Generators:
Egyptian research camps, 256
Fast tow, 191
Versatile range of, 433
Gland leakage, zero, 861
Glass-coated steel tanks, 702
Glass fibre sectional tanks, 800
Globe valve, 347
Government support for Neptune Glenfield development plan, 620
GRP sectional tanks, 378
Grundfos pump factory, Sunderland, 620
Gully emptier, lightweight, 376

H

Hepworth Plastics' reorganisation, 551
High pressure jetter, 434
Hoist and derrick, motorised, 435
Hoses, pvc, 862
Hungarian-Czechoslovak reservoir, 722
Hydraulic drill rigs ordered for Megget Water Tunnel, 352
Hydrogen sulphide monitor, portable, 707

I

Inspection glass, upvc, 68
Institute of Water Pollution Control:
  Amalgamation with IPHE and IWES, proposals, 205
  Inauguration of new president, 621
Institute of Public Health Engineers:
  Amalgamation with IWPC and IWES, proposals, 205
  Presidential election, 719
Institution of Structural Engineers, Sir Arnold Waters Medal, 208
Institution of Water Engineers & Scientists:
  Amalgamation with IPHE and IWPC proposals, 205
  Evidence to Finniston Committee, 205
  83rd Summer Meeting & Conference 1978, 334
Instrument workshop, mobile, 68
Instrumentation and Telemetry Feature Issue:
  Analysis and control instrumentation, 834
  Borehole monitoring and control system at Blythe — Moddershall, 845
  Data logger, no-moving-parts, 845
  Data monitoring by subscriber telephone, 851
  Economical telemetry system, 842
  Electronic measurement systems, 836
  Environmental monitoring equipment, 841
  Fault emulator checks test programme, 835
  Flood warning scheme for 3000km² of Sussex, 824
  Flow measurement system, 836
  Flow-type *p*H meter, 833
  Industrial microcomputer system, 828
  Innovations in process control, 833
  Magnetic inductive flowmeter, 828
  Measuring wastewater flow, a new-old approach, 848
  Microcomputer telemetry system for southern division of Thames Water 846
  Portable instrument technology, 835
  Ultrasonic flow measurement, 820
Instrumentation courses, Kent Instruments Ltd, 8
Investment in blending plant, Dearbourn Chemicals, 814
Ion exchange plant, Dow Chemicals, West Germany, 140
Ion exchange technology for production of pure water, 788
Ireland, Northern, The problem of water supply in, 10
Irrigation:
  Bangladesh, 206
  Burma, 66
  Chile, 255
  Indonesia, 139
  Ivory Coast, 121
  Pakistan, 206

J

Japan's water scene — Kyoto Congress, impressions of, 852
Jetter hose reel, self-aligning, 707
Joint sealants for use in sewage works, 506

K

Kent Instruments strengthens Midlands support, 390
Kielder leisure plan announced, 550
Kinetic analysis system, 797
Kitemark licence, upcv gravity sewers, 550
Kyoto Congress, impressions of—Japan's water scene, 852

L

Leak detection system, 859
Legal:
  Parliamentary Session 1977/78 — Private Bills: British Railways, British Transport Docks, British Railways (Selby), London Transport, Vale of Glamorgan (Barry Harbour), Cheshire County Council, County of Merseyside, Tamar Bridge, West Midlands County Council, West Yorkshire, 71
  Water Act 1945 — Section 37, Guarantee Mains, 592
Level control, 70
Level controller, electronic, 705
Level detector, sonic, 125
Level/flow recorder, 702
Level sensing mechanism, electronic, 859
Liquid level indication, ultrasonic, 801
Liquid level indicator, 707
Liquid-solid separation, 379

M

Mains and sewers records, National Water Council Working Party, 539
Measurement, dissolved oxygen, 70
Micro data transmission system, 316
Microscreens, rotary drum, 432
Middle East market opportunities, NatWest Bank viewpoint, 179
Misk Hill reservoir contract, 255
Modernising old overhead crane, 677
Mono Pumps Ltd expansion project, 330
Moscow, automated quality control for river water, 115
Motors electric, Egyptian order, 66
Municipal Wastewater Reuse News, 660

N

National Water Council:
  Approval for anti-bacterial rubber, 721
  Approved valve, 340
  Chairman retires, 621
  Chief visits south west, 549
  Future Chairman, 273
  Minister's visit, 549
  Repayment of loan to Orion Bank Ltd 552
Nephelometry, measuring turbidity, 317
New Addresses:
  Alpha Technical Services Ltd, 552
  Chemviron, 140
  Clearwater Systems Ltd, 816
  Fischer & Porter Ltd, 208
  Flow-Chem — Hydro Ltd, 86
  Fluk International Corporation, 816
  Robert Frazer Group, Forfar branch, 274
  Hands-England Drilling Ltd, 140
  Home Waterbehandeeling BV, 552
  Londex Ltd, 552
  M & H Pumps Ltd, 8
  Pipe Jacking Association, 621
  Polcon Environmental Control Systems Ltd, 816
  Russell pH Ltd, 816
  SAFI (UK) Ltd, 816
  Zimmite (UK) Ltd, 86
New Companies:
  Atlas Process Consultants Ltd, 720
  Clearwater Systems Ltd, 620
  Davy Bamag Turriff Ltd, 273
  F J C Lilley Ltd, 140
  In-Place Cleaning Ltd, 815
  SAIDCO, 86
  Simon Hartley Ltd, 329
  Whitehead & Poole (Hong Kong) Ltd, 538
  Wimpey Waste Management Ltd, 330
New flap valves have flexible doors, 343
New trade name, Comline, 550
New Year Honours, 7
Nitrate in water resources, 83
North West Water Authority:
  Annual progress report, 440
  Messages on tape, 422
  Willow Holme STW, extension, 121
Northumbrian Water Authority:
  Airy Holm dam, 66
  HQ topping out ceremony, 273
  Ice age boulders link Kielder and Tyneside, 814
  Keep down costs, 391
  Kielder Dam, slip membrane protects culvert, 433
  Kielder, EIB loan, 140
  Kielder leisure plan, 550
  Kielder project, review of progress, 139
  Kirkleatham reservoir fully operational, 719
  River Tees pumping station opens, 330

O

Overhead cranes for Yorkshire Water Authority, 374
Oxygen analyser, 184
Oxygen probe for unskilled staff, 194
Oxygen system for sewage scheme, 551
Ozone plant, German, for UK swimming pool, 255
Ozone plant, USSR, 274

P

Partially integrated on:
  A chemical conundrum, 413
  How hydrologists could be more useful, 585
  Travel sustenance, 304
  Unstopping the stopper, 366
  Yellow blotches before the eyes, 692
  You pays your money and, 725
Personal News: 63, 119, 189, 251, 306, 371, 372, 429, 430, 599, 699, 793, 794, 858
*p*H meters, hand-held, 377
Pig, multi-use, 434
Pipe-cleaning and maintenance service, 704
Pipe cutter, new wide-range, 242
Pipe fittings, polyethylene, 379
Pipe handling, easier, 800
Pipe Jacking Association establishes speakers' panel, 140
Pipe Jacking Association, new address, 621
Pipe Jacking under the A1 motorway, 357
Pipe supports, 704
Pipes and Pipelines Feature Issue:
  Connecting dissimilar pipe flanges, 737

Ductile iron pipe for pipe-jointing, 748
Ductile iron pumping main, 766
Grp — the modern alternative, 760
Grundomat soil displacement hammer breaks new ground, 752
Heat-shrink technology, 751
Large diameter pipe plant, 745
Mechanical pipe joints — present and future, 727
Mini tunnel uses compressed air on 1 metre tunnel, 748
Nylon aluminium fittings range, 756
Pipe jacking, 741
Pumps for pipewinding process, 738
Semi-spherical joints for large diameter steel pipes, 763
Slip-lining pipe renewal, 756
Some applications of chemicals and clays in tunnelling, 766
Stainless steel pipe repair clamp, 738
System drainage and ducting, 745
'Thin wall' steel pipe and its backfill — an integral structure, 753
Tunnelling techniques with special reference to sewerage, 769
Water-main relining, 738
Pipes and Pipelines:
Airlift to Nigeria, 537
Ceramic-steel repair compound, 126
Construction under canal, Japan, 551
Corrosion protection, Rutland water pipe, 314
Ductile iron main contract, 374
Effluent pipe renewal contract, 593
Expansion joints cut pipe noise, 125
Identification tapes, 707
M11 pipe contracts, 66
New distribution depot, Gatwick, Bartol plastics, 206
New high performance, large diameter pipe introduced, 365
New range by Dunlop Ltd, 273
NKK increased capabilities for coated pipes, 707
Pipemaking development, 389
Pitsford reservoir, new outlet channel, 255
Russian contract, 66
Stanton & Staveley contracts, 427
Storefield to Broughton main drain contract, 255
TAC pipe orders, 427
Trans-Bosporus submarine water pipelines, 622
Vitrified clay, 330
Plastic Coatings Ltd, new plant, 6
Plastic Coating Systems new technical centre, 392
Pollution monitor, automatic, 194
Polyethylene pipe fittings, 379
Portobello outfall at Brighton, 356
Powder coatings, 862
Pressure sensors, 798
Pressure testing pump sets, 70
Problems in evaluating the ability of strata to store or transmit pollutants, 667
Proceedings published, BHRA Fluid Engineering Conference on pipes, September 1977, 721
Product assessment department enlarged, 343
Publications Received: 71, 118, 181, 246, 308, 368, 416, 596, 696, 792, 794
Public debate on future water charges, Severn-Trent Water Authority, 622
Public Health Engineering Conference, design construction and operation of sewage works, proceedings, 140
Public services contracts, EEC directive on, 539
Public Works Exhibition Preview, 655
Pulsar equipment for water authorities, 694
Pump lift, 193
Pump protection device, 602
Pumps and generators for Hong Kong, 593
Pumps:
Air-operated transfer, 434
British for USSR, 374
Heavy duty peristaltic, 606
High capacity, 316
High performance, 860
High pressure, 69
Improved efficiency, 861
In-line, 859
Magnetic, for corrosive fluids, 704
Modular centrifugal, 801
New, 207
Plastic for sodium hypochlorite, 607
Rocket power, 862
Rolls rotary, increased production of, 798
Self-priming, 799
Slurry, 602
SPP pumps for Libya contract, 694
SPP Kuwait order, 427
Submersible, for deep operation, 262
Submersible, 376
Submersible pneumatic, 706
Submersible sump, 378
Sump, small, 192
Tractor drive, 706
Pumps and Generators Feature Issue:
Boosting of water pressure, 289
Diesel generating sets provide back-up power, 295
Generator back-up, mobile, for Thames Water Authority, 296
Generators, fast-tow for Anglian Water Authority, 296
Pumps for water services, 286
Generator launched, 299
Projects in dockland, 285
Pumps, reverse osmosis applications, 290
Level control and variable speed pumps, 293
Nine pump installation for Wessex Water Authority, 293
Pump range, extension to, 293
Quiet generators for Pann Mill, 294
Range of generators, Viggen, 299
Range of generators, Vigilante, 299
Rugged self-priming pumps, 290
Pumps and diesels in Baglan pumping station, 499
Purity meters, 318

Q

Queen's Award for Export Achievement:
Braithwaite & Company, 721
Simon-Hartley, 412
Queen's Awards 1979, 539

R

Rainfall During:
November 1977, 72
December, 128
January, 1978, 196
February, 264
March, 320
April, 380
May, 436
June, 540
July, 608
August, 708
September, 802
October, 870
Regulator, water quality, for cooling plant, 260
Remote control for anti-drought scheme, 593
Reservoir and pumping station contract, UAE, 855
Reservoir roof construction, 434
Reverse osmosis equipment, Aquastat Ltd, 259
Reverse osmosis industrial plant, Algeria, 537
Reverse osmosis plant for oil refinery, 256
River pollution survey, 207
River quality objectives STWA, 552
Rotary distributors, grp and pvc, 319
Rotary drill, hydraulic, 260
Rubber linings, protective, 604
Rutland water, lighting for pumping stations, 185

S

Safety, electricity isolators, 68
SAFI UK new production unit, 7
Salt water storage tanks, relining, 313
Saudi water plan, UK to assist, 621
Scale and corrosion prevention, 800
Scale inhibitors, chemical, for cooling systems, 97
Scottish Regions:
Aberdeen sewage project, 814
Aberdeen water plan, 622
Better supply for Highlands, 550
Castlehill reservoir — needs more cash, 392
Clyde water plans, 84, 721
Debate on fluoride, 536
EEC grants for Scotland, 719
Glen Devon dam safety go ahead, 330
Glen Devon dam, spalling, 138
Megget dam, 778
Megget reservoir, 7
More water for Water of Leith, 722
Raw water tank contract, 856
Salmon in the Clyde? 815
Seagulls threat to reservoir, 622
Shoring machine contract, 594
Valve actuators, electric for Shieldhall, 693
Water rationing warning, 539
Water services in Scotland, 465
Screed resists major acid attack on tunnel diversion scheme, 357
Scum boards, pre-curved, 261
Sea water de-salting kits, 374
Selling sand to the world, 586
Severn-Trent Water Authority:
Annual progress report, 453
Birmingham drought warning, 536
Birmingham Rea sewerage scheme, pipes for, 122
Coleshill carbon regeneration furnace, 303
Direct billing, 137
Ductile iron main contract, 374
East Midlands reservoir scheme approved, 331
Loughborough water reclamation works contract, 795
Opening of Melbourne water treatment plant, 663
Public debate on future water charges, 622
River quality objectives, 552
Water quality 1977/78, 719
Working party, 83

Sewage pumping stations, 602
Sewer cleaning service, 184
Sewer dragging, automatic bucket emptying trailer winch, 125
Sewerage and Sewage Treatment and Disposal:
Beckton STW, inauguration of, 536, 555
Birmingham Rea scheme, pipes for, 122
Bristol Avonmouth 2 scheme, pipes for, 122
Cambridge works opened, 719
Completion of Boston STW, 589
Cranes for new plant, Strathclyde, 255
Dorr-Oliver processes to be marketed world-wide, 390
Hereford waterworks opening, 331
Hong Kong, 65
Kilkenny contract, 374
Laing sewage contract, Maldon, 374
Libyan contract, 427
Meon Valley scheme, pipes for, 123
Mini treatment plant, 860
Mountain youth hostel installation, 256
New system, Abu Dhabi, 593
Opening of Gallion's Reach pumping station, 619
Oxygen system, Totnes STW, 551
Portswood new works, 537
Pumps and diesels for Hong Kong, 593
Queensferry contract, 795
Second UK Unox plant, 603
Sewage treatment works contract, 795
Singapore sewage treatment works contract, 796
Works contracts awarded, 693
Shoring machine — Scottish contract, 594
Signal booster, 378
Sintered carbide tiling for centrifuge, 435
SLD Pumps Ltd — new pump hire depots, 332
Sling, load spreading, 127
Slip membrane protects culvert, Kielder dam, 433
Sludge reports, Scottish Development Department Engineering Division, 7
Sludge filter bags, 706
Sludge to land — economic considerations, 531
Sludge Treatment & Disposal Feature Issue:
A new generation of filter presses, 395
DoE report on sewage sludge disposal, 399
New press gives dryer sludges, 402
Quick discharging sludge spraying tanker, 404
Self-priming positive displacement pumps, 400
Sludge application-to-land techniques, 406
Sludge dewatering plant for small communities, 404
Sludge dewatering with centrifuges, 399
Sewage treatment, another milestone in the one hundred year development of the centrifugal separator, 407
Sludge treatment for every industry, 400
Slug test, the use of in groundwater investigations, 174
Smeaton, John, nominations for medal, 207
Southern Water Authority:
Annual progress report, 458
Exploratory boreholes, 314
Gravesend sewage treatment contract, 795
Hardham water treatment works contract, 855
Kent sea defence contract, 796
Meon Valley sewerage scheme, pipes for, 122
Otterbourne automatic filter wash system, 421
Portswood STW opening, 537
River Itchen sewage disposal works contract, 796
River Medway crossing, 796
South Hampshire main drainage project, 65
Thames tidal flood defences contracts, 185
South West Water Authority:
Annual progress report, 460
Roadford inquiry, 84
Visit of NWC chief, 549
Water supplies in south west, 815
Water treatment plant, Lizard, 855
West country water shortage, 720
Wimbleball reservoir, impounding ceremony, 5
Soviet land reclamation, 332
SPP Ltd, school leavers' visit, 139
Standing Committee of Analysts, first report, 138
Steam and water hose station, 319
Steam engine saved, 724
Submersible work vehicle, unmanned, 139
Suction hose, transparent, 705
Surface water and foul sewer contracts, 313
Swiss tunnel confirms Mini's urban role, 361

T

Tachometer, automatic, 191
Takeover widens actuator market for Yorkshire manufacturers, 344
Tank cleaner, 70
Tank cleaning machines, 798
Tank linings, taint-free, 379
Tank range increased, Tristorage, 704
Tanker, demountable tipper for, 126
Tanker, mammoth combination, 124
Tanker, slurry, improved, 127
Tanks:
Bolted steel, corrosion resistant, 317
Glass fibre, sectional, 800
Relining salt water storage, 313
Sectional grp, 378
Steel, glass-coated, 702
Storage, easily erected, 704
Telemetry:
Remote control of brine/water pumping, 186
Second generation system for Eastbourne Waterworks Co, 279
System for Cambridge Water Company, 66
Thames Barrier piling, 314
Thames Barrier, pumping out north cofferdam, 539
Thames Water Authority:
Annual progress report, 456
Beckton STW inaugurated, 555
Carterton drainage scheme opened, 331
Computer system installed, 855
Discussion paper on charging for water services, 539
Gallion's Reach pumping station opened, 619
Inauguration of Beckton STW, 536
Instalment plan for domestic customer, 721
Kempton Park water works, remodelling, 121
Mobile generator back-up, 296
Nettley Mill contract, 796
Newbury foul sewer contract, 313
PULSAR contract, 694
Thermostatic baths, programmed dual-temperature, 319
Trailer winch, 317
Training course at Portacel, 275
Trans-Bosporus submarine water pipelines, 622
Trent River Trust scholarship, 6
Tuke & Bell form export department, 331
Tunnel construction, major trends in, 492
Tunnel for Lune-Wyre river transfer link, 360
Tunnel guidance system, 360
Tunnelling machines cope with varied rock conditions at Kielder, 353
Tunnelling in the Water Industry Feature Issue:
Hydraulic drill rigs ordered for Megget water tunnel, 352
Pipe jacking under the A1 motorway, 357
Portobello outfall at Brighton, 356
Screed resists major acid attack on tunnel diversion scheme, 357
Swiss tunnel confirms Mini's urban role, 361
Tunnel for Lune-Wyre river transfer link, 360
Tunnel — 3km — for Rothley Valley trunk sewer, 358
Tunnel guidance system, 360
Tunnelling machines cope with varied rock conditions at Kielder, 353
Two tunnel systems from the same stable — iron segments and concrete pipe jacking, 351
Turbidity measurement by nephelometry, 317

U

Ultrasonic flow measurement, 820
Underground access units, 421
Upvc gravity sewers, Kitemark licence for, 550

V

Valve actuator, electric, 607
Valve actuators, electric for Shieldhall, 693
Valve disc for buried services, 316
Valve ends, pvc, 262
Valves:
£115 000 order, 314
Australian order, 186
Ball, 859
Bonnet, 705
Butterfly, 605
Control, piston operated, 67
Gate valve grinding machine, 127
Globe, 603
Kitemark first for Blakeborough, 389
Labour saving, 191
New design, 435
NWC approval for wedge gate valve, 376
Pneumatic, anti-drool, shut-off, 126